Washington State Institute for Public Policy

Benefit-Cost Results

Transitional care programs to prevent hospital readmissions: Comprehensive programs

Benefit-cost estimates updated July 2015. Literature review updated December 2014.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our technical documentation.

Program Description: Comprehensive transitional care programs focus on preventing future hospital readmissions after discharge interventions include pre-discharge assistance (e.g., a transition coach, enhanced discharge planning, and primary care provider communication), as well as post-discharge follow-up.

Benefit-Cost Summary

Program benefits	
Participants	$48
Taxpayers	$838
Other (1)	$725
Other (2)	$213
Total	$1,824
Costs	($413)
Benefits minus cost	$1,412

Summary statistics	
Benefit to cost ratio	$4.42
Benefits minus costs	$1,412
Probability of a positive net present value	100 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to: Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Health care (hospital readmissions)	$48	$838	$725	$421	$2,032
Adjustment for deadweight cost of program	$0	$0	$0	($207)	($207)
Totals	$48	$838	$725	$213	$1,824

We created the two "other" categories to report results that do not fit neatly in the "participant" or "taxpayer" perspectives. In the "Other (1)" category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the "Other (2)" category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$413	1	2014	Present value of net program costs (in 2014 dollars)	($413)
Comparison costs	$0	1	2014	Uncertainty (+ or - %)	37 %

Typical study reports cost components including: salary of nurse practitioner (main cost), cell phone and pager, mileage expenses, reproduction of personal health record

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.

Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Hospital readmissions	Primary	11	1597	-0.289	0.001	-0.289	0.061	72	0.000	0.000	73

Citations Used in the Meta-Analysis

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